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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,921	07/03/2000	William Patrick Flanagan	RD-27,270/USA	4350

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08/27/2003

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EXAMINER

SINES, BRIAN J

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 08/27/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/609,921

Applicant(s)

FLANAGAN ET AL.

Examiner

Brian J. Sines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-15,17-29 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-29 and 31-38 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 – 4, 6 – 15 and 17 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Freitag et al. (U.S. Pat. No. 6,566,461 B2). Regarding claims 1, 6, 7, 14, 17 and 18, Freitag et al. teach an apparatus comprising: a reaction substrate (reactor block 100) comprising at least one substrate reservoir (wells 104 further comprising removable reactor vessels 102), wherein the reaction substrate has a first temperature; and a head plate (plate 300 or header block 200) positioned to provide a sealed pressurized headspace (single transfer line 302 or single header barrel 202) adjacent the substrate reservoir, wherein the head plate has a second temperature (see col. 5, lines 13 – 67; col. 6, lines 1 – 67; col. 7, lines 1 – 67 & col. 8, lines 1 – 67; figures 3 & 7). Freitag et al. teach temperature monitoring and control with reference to the monolithic reactor block 100 (see col. 18, lines 60 – 63). Freitag et al. teach that the apparatus is capable of being operating at temperatures of from about – 100 °C to about 300 °C (see col. 19, lines 10 – 14). Freitag et al. teach that the apparatus is structurally capable of operating at reaction pressures of from atmospheric to about 1,000 psi, which is approximately 68.045 standard atmospheres (see col. 7, lines 11 – 19). The applicant is advised that apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See In re Danley, 120 USPQ

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528, 531 (CCPA 1959); *Hewlett-Packard Co. V. Bausch and Lomb, Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). The applicant is further advised that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art teaches all of the structural limitations of the claim. See Ex Parte Masham, 2 USPQ2d 1647 (BPAI 1987) (see MPEP section 2114). Regarding claims 2, 3 and 14, Freitag et al. teach the incorporation of the independent temperature monitoring and control of the reaction substrate and the head plate (see col. 3, lines 28 – 35; col. 9, lines 43 – 59; col. 18, lines 6 – 67; col. 19, lines 1 – 29). Regarding claims 4 and 15, Freitag et al. teach that a gas source is in communication with the sealed pressurized headspace, wherein the gas source includes at least one gas (see col. 48 – 55). Regarding claims 8 – 15 and 17 – 20, it should be noted that these claims are directed to an apparatus. Therefore, it is the structural limitations of the apparatus, as recited in the claims, which are considered in determining the patentability of the apparatus. These claims recite various process or use limitations, which are accorded no patentable weight to an apparatus. For example, these claims recite how the apparatus is to be operated, or what is intended to be used with the apparatus, such as a specific reactant system and its associated characteristics (e.g., film thickness), which do not impart any limitations to define the structure of the apparatus being claimed. Process limitations do not add patentability to a structure, which is not distinguished from the prior art. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

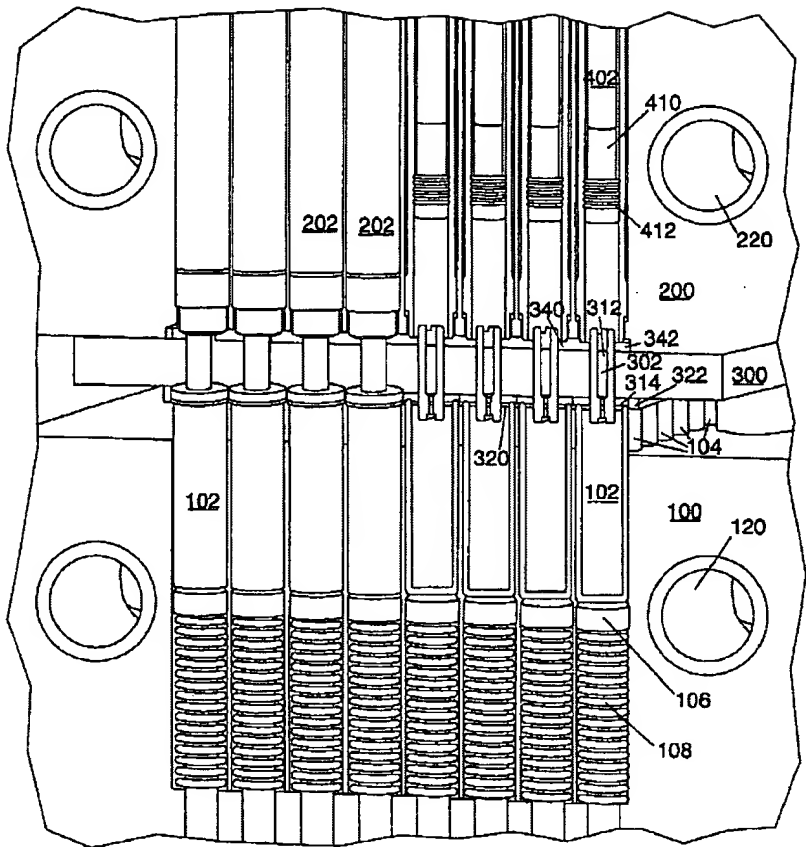


Fig. 3

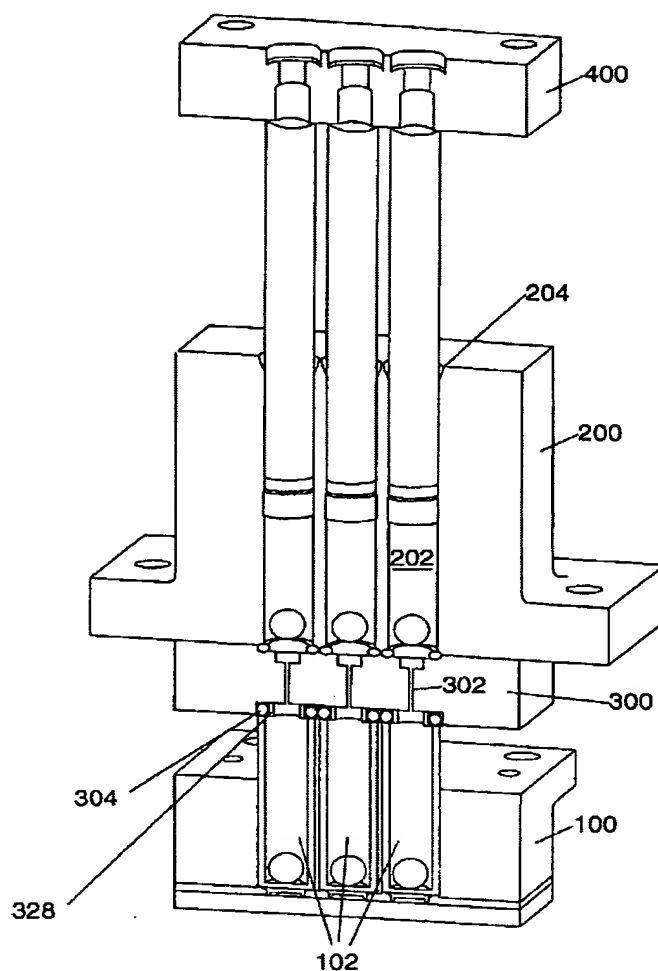


Fig. 7

### *Response to Arguments*

Applicant's arguments with respect to claims 1 – 4, 6 – 15 and 17 – 20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments and amendments with respect to the rejection of claims 21 – 29 and 31 – 38 have been fully considered and are persuasive. The rejection of claims 21 – 29 and 31 – 38 has been withdrawn.

***Allowable Subject Matter***

Claims 21 – 29 and 31 – 38 are allowed.

The following is an examiner's statement of reasons for allowance:

Freitag et al. do teach an apparatus and method for synthesizing and screening chemical compounds. However, Freitag et al. in addition to the cited prior art do not specifically teach or fairly suggest a method for the rapid screening of potential reactants, catalysis and reaction conditions, wherein the method further incorporates the use of a plurality of reactant systems partially embodied in a liquid film and the liquid film having a defined thickness L, which is sufficient to allow a reaction to be independent of the evaporation of the liquid film and the mass transport rate of a gas into the liquid film.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Desrosiers et al. teach methods and apparatus for rapidly screening combinatorial libraries. McGowan et al. teach a reaction block and cover. Gubernator et al. teach a microtiter chemical reaction system.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines, Ph.D. whose telephone number is (703) 305-0401. The examiner can normally be reached on Monday - Friday (11:30 AM - 8 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700